

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL		97-004
INSTRUCTIONS		
<p>1. The preparing activity must complete blocks 1,2, 3, and 8. In block 1, both the document number and revision letter should be given.</p> <p>2. The submitter of this form must complete blocks 4, 5, 6, and 7.</p> <p>3. The preparing activity must provide a reply within 30 days from receipt of the form.</p> <p>NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.</p>		
I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER MIL-STD-2301	2. DOCUMENT DATE (YYMMDD) 930618
3. DOCUMENT TITLE Computer Graphics Metafile (CGM) Implementation Standard for the National Imagery Transmission Format Standard		
<p>4. NATURE OF CHANGE <i>(Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)</i></p> <p>The following recommends additions to the NITFS Implementation Profile for CGM needed for accurately rendering layers of information from a Geographic Information System vector data set. In particular, a means of having transparent holes in a polygon is needed.</p> <p>Add three elements to the NITFS Implementation Profile for CGM that exist in the current ISO and ANSI profiles:</p> <p>1&2) From the ISO/IEC 8632-1:1992 CGM Standard, add AUXILLARY COLOUR(Section 5.5.3) and TRANSPARENCY (Section 5.5.4). Together these elements enable portions of primitives to rendered "transparently".</p> <p>3) Add POLYGON SET. This element defines sets of polygons which can be either holes in the larger polygon or a group of disjoint polygons. This allows a collection of polygons to be collected together as a single element. The element "Polygon Set", can be found in section 5.6.8 of part 1, page 168 of the 1992 ANSI CGM standard.</p>		
<p>5. REASON FOR RECOMMENDATION</p> <p>The Combat Terrain Information Systems Program, at the Topographic Support Center, Ft. Belvoir, VA, is developing the Army's Digital Topographic Support System (DTSS). PD CTIS wants to use NITF as the basis for generating georeferenced softcopy products for providing terrain analysis products and map database updates to all Army systems and at the joint level as well.</p> <p>DTSS uses a Geographic Information System (GIS) to perform terrain analysis, which results in a GIS vector coverage as an end product. The layers of this coverage can be represented as a set of CGM layers. The problem that this change will solve is that there is currently no way to have transparent holes within a polygon, which is needed to accurately represent layers of information from a GIS vector coverage.</p> <p>Fundamentally, there needs to be the addition of supporting transparent holes (transparent polygons within a polygon) to the NITFS implementation profile for CGM. This is a critical issue for us to proceed with generation of these products.</p>		
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c. ADDRESS <i>(Include Zip Code)</i>	<p>IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT:</p> <p>Defense Quality and Standardization Office 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466 Telephone (703) 756-2340 AUTOVON 289-2340</p>	